



Solid Waste Technical Assistance





TABLE OF CONTENTS

INTRODUCTION:	
Developing a Contract Monitoring Unit	
STEP 1:	
Build a Base for Contract Monitoring and Administratio	n :
Review Legal Authority	
Prescribe Monitoring in the Request for Tenders	. 6
Fund Contract Monitoring and Administration	
STEP 2:	
Choose an Organizational Structure	
Establish Organizational Goals and Objectives	
Determine Placement in the Overall Governorate Structure	1
Identify the Appropriate Number of Organizational Levels	
Design the Upper Level Organizational Structure	7
CMU Leadership	-
Financial and Administrative Support	
Legal Support	10
Public Awareness and Communications	10
Technical Support and Compliance Analysis	10
Design the Local Level Organizational Structure	1
STEP 3:	
Staff the Organization	19
Staff the Upper Level Organization	14
CMU Leadership	14
Financial and Administrative Services	14
Legal Support	15
Public Awareness and Communications	15
Technical Support and Compliance Analysis	10
Staff Local Level Organization	17
Determine the Appropriate Number of Monitors	17
Determine the Number of Data Specialists and Public	
Awarenessand Communications Coordinator	- 18
Obtain Ministry Approval for the CMU Positions	18
STEP 4:	
Identify Equipment Needs	19
Upper Level Equipment Needs	19
Local Level Equipment Needs	19
STEP 5:	
Develop A Budget	20
STEP 6:	1
Develop A Contract Monitoring Plan	2
Introduction	2
Scope of the Monitoring Plan	2
Purpose and Structure of the Document	2
The Basis for CMU Activities	2
Statement of Monitoring Independence and Accountability	2
Organizational Structure and Responsibilities	22
Field Monitor Procedures Manuals	22
STEP 7:	0.
Hire and Train Staff	23
ADDENDIY As Francia lab Descriptions	
APPENDIX A: Example Job Descriptions APPENDIX B: Example CMU Equipment Needs Workshe	
APPENDIX C: Example Table of Contents for a CMP	1
TILL TILL TIL THE TANISTO TAUTO OF CONTONIO TOT A CIVIL	-

INTRODUCTION

DEVELOPING A CONTRACT MONITORING UNIT



hen a Governorate signs a contract with a private sector contractor to provide solid waste

management or public facility cleaning services, the contract must be monitored by the Governorate. The purpose of contract monitoring is to ensure that the contract terms and conditions are being met, and that residents and businesses are being provided the services as as specified in the contract.

Contract signing marks the beginning of the contract administration and monitoring process.

Contract administration and monitoring are important activities to insure that both parties to the contract are fulfilling their obligations in compliance with the terms of their agreement.

Contract monitoring and administration of a solid waste services contract requires development of a Governorate institutional infrastructure dedicated solely to that purpose. This chapter is designed to provide guidance for those Governorate officials and administrators responsible for development and implementation of the organization and infrastructure for monitoring of solid waste management service contracts.

This chapter presents a seven-step approach to implementing a contract monitoring department or unit (CMU). The seven steps are as follows:

Step 1: Build a Base for Contract Monitoring and Administration

Step 2: Choose an

Organizational Structure

Step 3: Staff the Organization

Step 4: Identify

Equipment Needs

Step 5: Develop a

Budget

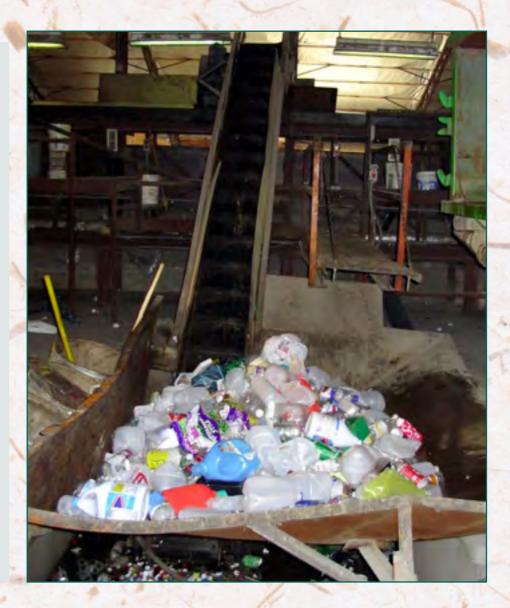
Step 6: Develop a

Contract Monitoring

Plan

Step 7: Hire and Train

Staff





Since circumstances may change, and unexpected events do occur, there should be established also procedures incorporated in special contract clauses to negotiate changes in tariffs, service schedules, or administrative procedures or to make any other necessary adjustments based on experience gained from contract monitoring and administration.

Law Number 38/1967 Minister of Housing and Utilities Decree No. 134/1968 Prime Minister's Decree No. 338/1995

Law Number 4/1994

he need for a Contract Monitoring Unit (CMU) must be taken into account early in the privatization process. Those responsible for implementing the privatization process should be familiar with the national laws that provide the authority for Governorate regulation and monitoring and monitoring of solid waste management services. They should convey in the Request for Tenders (RFT) their intention to use this authority. Moreover, the financial means to implement and maintain continuous contract monitoring must be identified early on to demonstrate to all stakeholders that their expectations of improved services have a high probability of attainment.

REVIEW LEGAL AUTHORITY

The Public Cleaning Law¹ and its implementing Executive Regulation² authorize local councils to license solid waste service contractors and promulgate and enforce conditions governing their activities (Article 6 in the Law and Article 9 in the Executive Regulations). Article 39 of the Executive Regulations³ for Environmental Law⁴ also authorizes local administrative authorities to manage the collection of solid waste. The implementing Executive Regulations for the Public Cleaning Law contain several articles pertaining to the monitoring of solid waste service Contractors by local authorities.

- Article 4: Defines "Contractor" as any person or organization with which the local authority contracts to provide solid waste collection, transfer, and disposal.
- Article 5: Gives the local authority responsibility to manage solid waste and authorizes it to contract services, according to the conditions and specifications established by the local council.
- Article 7: Requires all solid waste Contractors to comply with the requirements of the law as well as all conditions and specifications established by the local council.
- Article 8: Assigns the local authority with oversight for Contractor performance.
- Article 14: Requires Contractors to maintain collection vehicles, to inform the local council of the number and location of collection vehicles, and to comply with health regulations regarding vehicle washing.

PRESCRIBE MONITORING IN THE REQUEST FOR TENDERS

The contractual authority for the monitoring activities to be performed by the CMU should be clearly specified in the Contract General Conditions and Service Specification sections of the RFT. The RFT should contain clauses that address the following issues:

- · Access to Facilities: The fact that the Governorate has access to the Contractor's facilities at all times should be stated in the General Conditions.
- Performance Standards: Make it clear that the Contractor is obligated to perform services in a manner that meets all the Performance Standards. Performance Monitoring provides the means to evaluate compliance with the Performance Standards.
- Right to Monitor Services: In the specifications for each service the Performance Monitoring section should state that the Governorate will assign monitors to observe and evaluate the Contractor's compliance with the Performance Standards.
- Failure to Provide Service: If the Contractor fails to provide a service, the Governorate may issue an instruction requiring the Contractor to provide the service properly. This clause should further state that the Governorate is authorized to remedy any failure to provide service, deduct the cost of the remedy from the payments due the Contractor, and to deduct penalties (as specified in the contract) from the payments due the Contractor.

FUND CONTRACT MONITORING AND ADMINISTRATION

Commitment to implementation and ongoing operation of a CMU brings with it the necessity to identify an adequate and sustainable source of funding. As an indispensable element of private sector provision of services, monitoring is one of the inherent costs and should be funded through the same cost recovery mechanism selected for funding of Contractor services.

STEP 2

CHOOSE AN ORGANIZATIONAL STRUCTURE

The desired outcome of contract monitoring and administration is that there is full compliance by both the Contractor and the Governorate with all the relevant contract provisions during the entire life of the contract. Stakeholders, including employees, consumers/users, Ministry officials or the public, should be confident that a major objective of monitoring will be to preserve and protect the rights and interests of all the parties.

Monitoring costs will represent a minority, but not insignificant share of total service costs, and thus should be estimated and included in any preliminary estimates of total privatization costs.

The need to identify and budget for monitoring costs is ample justification for initiating planning for the CMU early in the privatization process.

Development of a budget for implementation and operation of implementation and operation of the CMU is addressed in a later section.



electing an organizational structure that facilitates administration of the contract will significantly increase the probability of achieving service goals and objectives while ensuring a long term positive relationship with the Contractor. The process of selecting the most suitable structure to meet the unique service needs and objectives of the Governorate should consist of the following steps:

- Establish organizational goals and objectives.
- Determine placement in the overall Governorate structure.
- Identify the appropriate number of organizational levels.
- Design the Upper Level Structure.
- Design the Local Level Structure.

ESTABLISH ORGANIZATIONAL GOALS AND OBJECTIVES

Before considering organizational structure alternatives, those responsible for developing and implementing the CMU need to be in full agreement as to the organization's goals and objectives. These might include some or all of the following:

- Ensuring that the Contractor complies with all contract terms, service specifications and minimum technical requirements.
- Achieving prompt and fair resolution of any problems during performance of the contract services.
- Having the ability to make modifications or negotiate cost and/or schedule changes.
- Ensuring judicious assessment of penalties and payment of accurate service fees.
- Attaining high quality service performance in compliance with

contract terms to cultivate long term customer financial support.

 Improving the public's understanding of their responsibilities for solid waste management through public outreach and monitoring compliance with rules and regulations.





DETERMINE PLACEMENT IN THE OVERALL GOVERNORATE STRUCTURE

Achievement of service monitoring objectives can be best accomplished by designating a CMU within the Governorate to be responsible for monitoring contractor compliance. The CMU may be integrated into an existing Governorate organization relating to solid waste management or be established as an entirely new and separate unit at the Governorate level. The decision as to the preferred option should take into account the following:

- The compatibility of the goals and objectives of the existing and new organizations.
- The qualifications and experience of staff in the existing organization.
- The availability and type of existing funding mechanisms.
- The past performance of the existing organization.

If integrated into an existing organization, every effort should be made to secure autonomy for the CMU.

IDENTIFY THE APPROPRIATE NUMBER OF ORGANIZATIONAL LEVELS

Depending on the geographic size or population of the Governorate, or the number and type of services, the CMU may include from one to three levels or tiers. Three tiers will usually only be required if a Governorate decides to divide service areas into "zones" and award a separate contract for each zone. For example, due to its population and number of housing units, the Governorate of Cairo was divided into four service zones with a separate private contract awarded in each zone. The Cairo Governorate adopted a three-tiered organizational structure as illustrated in Figure 6.1.

On the other hand, where services are to be provided Governorate wide throughout the whole Governorate by only one contractor, a two-tiered organization with a headquarters (Governorate) and local (District or City) level will suffice. The headquarters level tier will provide CMU leadership, overall contract administration, monitoring of discrete contract services and facilities, and all organizational support functions. The local tier encompasses the actual field monitoring of local services for Contractor compliance with contract terms, and public compliance with Governorate solid waste decrees and ordinances. Figures 6.2 and 6.3, the contract monitoring organizational structures adopted by the Governorate of Alexandria and Governorate of Qalyoubiya respectively, provide examples of two-tiered organizational structures.

It is essential to select an administrator with solid waste management experience, commitment to the principals of privatization, and a demonstrated ability to motivate personnel to work toward a common objective.





FIGURE 6.1: EXAMPLE OF A THREE-TIERED CMU ORGANIZATIONAL STRUCTURE

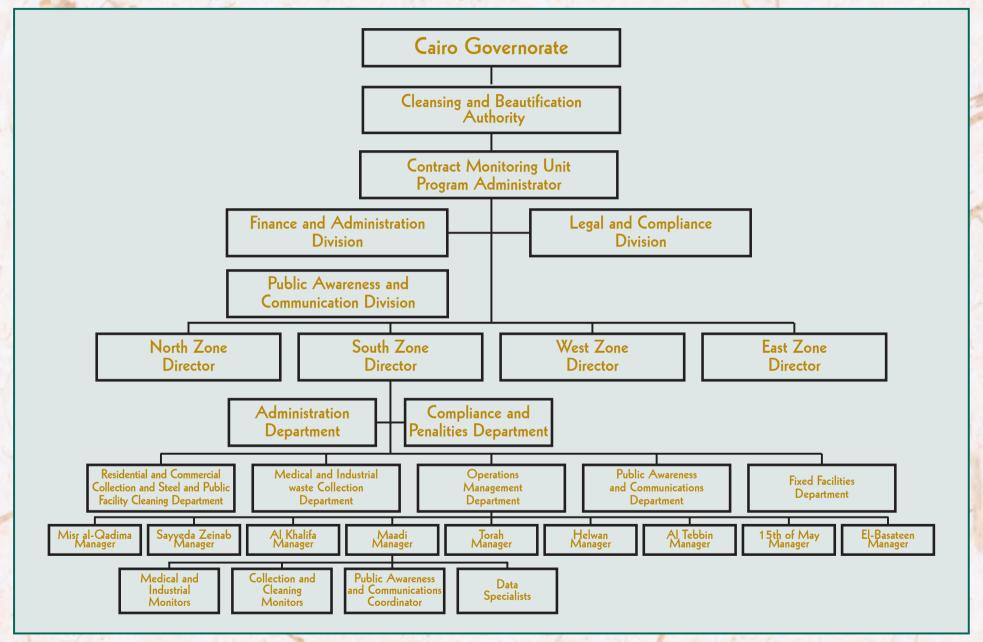


FIGURE 6.2: EXAMPLE OF A TWO-TIERED CMU ORGANIZATIONAL STRUCTURE

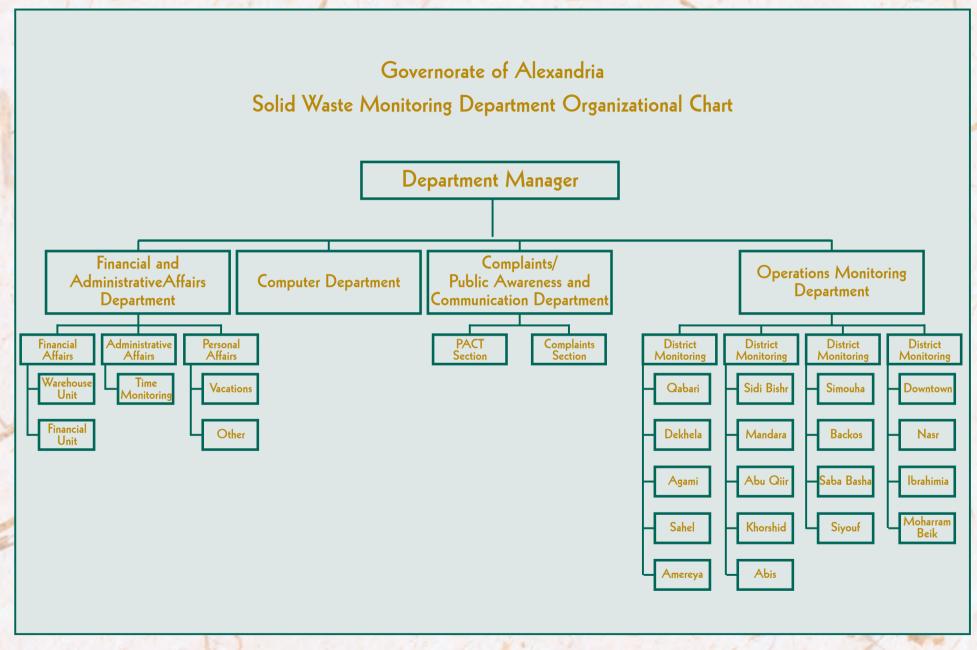
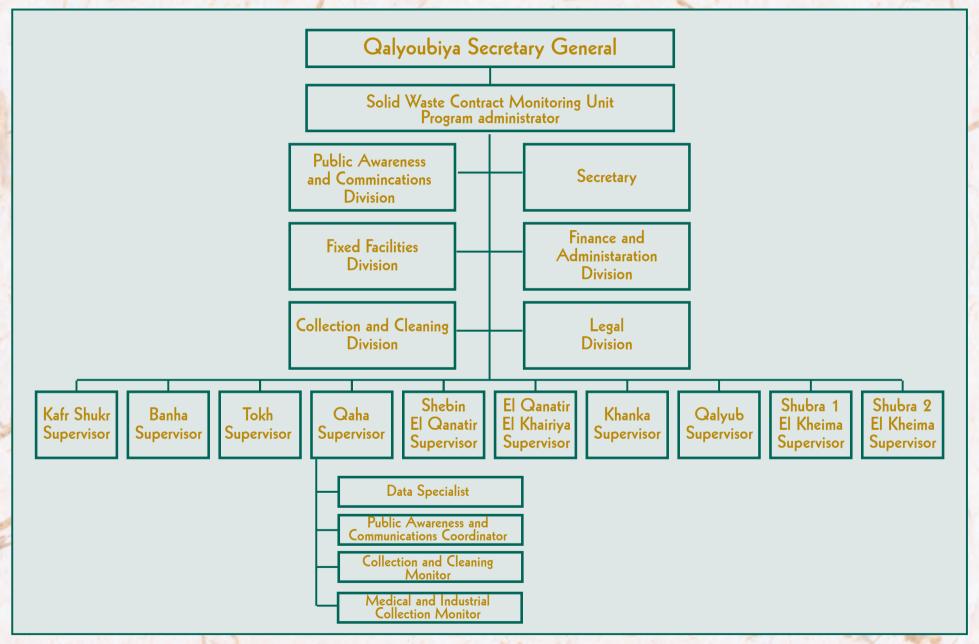


FIGURE 6.3: EXAMPLE OF A TWO-TIERED CMU ORGANIZATIONAL STRUCTURE



DESIGN THE UPPER LEVEL ORGANIZATIONAL STRUCTURE

The upper levels in the CMU include headquarters and, if a three-tiered organization is selected, zone levels. The upper levels provide the following functions:

- · CMU leadership.
- Financial and administrative services
- Legal support.
- Public awareness and communications
- Technical support and compliance analysis.

In a two-tiered structure, headquarters provides all of these functions. In a three-tiered structure, headquarters provides the first four functions, but the zones are where the contracts are managed, so they provide the technical support and compliance analysis. In a three-tiered structure, the Zones also provide some CMU leadership, financial and administrative services, and legal support, and implements the public awareness and communications activities at the Zone level.

CMU LEADERSHIP

A Program Administrator should be appointed by the Governor to be responsible for overall CMU performance. The Program Administrator should be the Governorate's Contract Representative and, as such, be able to directly deal with the Contractor regarding contract compliance. Preferably, this person should have been involved through the entire project life cycle, including project feasibility analysis, tendering, tender evaluation, contract negotiations, and contract award. The Program Administrator's responsibilities include:

- Provide strategic program direction.
- Establish management goals and contract monitoring objectives.
- Manage and direct the staff at the Governorate level.
- Develop and manage compliance with an annual CMU budget.
- Negotiate contract modifications.
- Inform Governorate leaders on the performance of the program.

In a two-tiered structure, the Program Administrator is also responsible for identifying and resolving contract noncompliance and making penalty and payment decisions. In a three-tiered structure, the Zone Director is responsible for these activities. To do that, the Program Administrator must delegate to the Zone Director the authority to monitor contract compliance and resolve noncompliance for the contracts in his or her Zone.

FINANCIAL AND ADMINISTRATIVE SUPPORT

The financial and administrative support department of the CMU will perform all administrative activities, as well as manage the receipt and payment of funds required for maintaining the CMU on a sustainable basis. The responsibilities of this organizational unit should include, but not necessarily be limited to, the following:

- Human resource management.
- Facilities management.

- Procurement of office and field equipment and supplies.
- Tracking collection of fees for service and interact with the Governorate Finance Department.
- Processing Contractor invoices and arrange for payment from the Governorate Finance Department.
- Performing analyses to ensure that future service costs and cost recovery levels remain in balance.
- Coordinating preparation and maintenance of annual budget in conjunction with the Program Administrator.

In a three-tiered system, the Zone level finance and administration office would share responsibilities with the headquarters office in regards to providing administrative support, receiving and processing Contractor invoices, and preparing and managing the annual Zone budget. However, the headquarters office would retain full responsibility for tracking fee collections and arranging for Contractor payments.

Some Governorates may choose to put the function of compiling Contractor noncompliance and calculating penalties in the finance and administration office, as did the Governorate of Qalyoubiya. Others may choose to put this function in the legal office, as did the Governorate of Cairo.



LEGAL SUPPORT

The CMU requires legal expertise to provide internal legal services and evaluate Contractor compliance with all legal contract terms. The responsibilities of the legal office should include, but not be limited to, the following:

 Serve as legal counsel for the CMU and represent its interests in all legal matters.

 Advise CMU staff of legal rights and obligations in dealing with the public.

 Draft legislation or amendments to existing Governorate ordinances.

 Resolve disputes concerning Contractor compliance with contract terms by initiating and facilitating arbitration procedures if necessary.

 Facilitate legal possession of and access to any Governorate facilities that are to be transferred to the Contractor.

 Obtain and maintain necessary permits, approvals and licenses for the CMU and assist the Contractor in similar activities.

 Compile Contractor noncompliance and calculate penalties, if this function is not performed by the finance and administration office.

In a three-tiered system the Zones may have legal offices or legal and compliance offices that perform the last three functions. The other legal functions, however, need to be consistent across the CMU, so the headquarters office would retain all responsibilities for serving as legal counsel, advising CMU staff, drafting legislation, and facilitating arbitration.

PUBLIC AWARENESS AND COMMUNICATIONS

Public awareness and support of solid waste management objectives is essential for successful achievement of service objectives. Governorate goals will be almost impossible to achieve without the widespread support and cooperation of residents, institutions, and businesses.

Achieving and maintaining a clean environment in the Governorate will depend as much on changing waste generator habits as it will on the proficiency of the service Contractor.

The Public Awareness and Communications Team (PACT) office should be given the responsibility for winning public support and improving existing waste handling behavior. The roles and tasks of the PACT are explained in detail in Chapter 7. In general, the responsibilities of the headquarters Public Awareness and Communications office should include, but not be limited to, the following:

 Develop, implement, and manage the Governorate-wide Solid Waste Management education and promotion strategy.

 Coordinate with the Contractor(s) in the development and implementation of their required public information program(s).

 Design and produce public awareness materials, events, and campaigns.

 Solicit outside funding and private sponsorship of pubic awareness and communications campaigns.

• Prepare news articles and press releases.

 Design, implement, manage and analyze surveys that measure consumer satisfaction with the quality and performance of contract services. Train Public Awareness and Communications Coordinators in the local offices.

 Implement public awareness programs at the Governorate or Zone level.

 Monitor Contractor compliance with public information requirements.

In a three-tiered system, the Zones may have public awareness and communications offices with responsibilities to train local coordinators, implement Zone level activities, and monitor Contractor compliance with public information requirements, but the other activities would be retained at the headquarters level.

TECHNICAL SUPPORT AND COMPLIANCE ANALYSIS

The upper levels of the organization are responsible for providing all necessary technical expertise, overseeing all monitoring, and maintaining all official records concerning Contractor compliance with service specifications and minimum technical requirements. In a two-tiered structure, these responsibilities are housed in the headquarters. In a three-tiered structure, these responsibilities are solely housed at the Zone level, as they are specific to individual contracts.

The technical offices are responsible for providing technical support and compliance analysis for the following:

- Local Service Monitoring.
- Specialty Service Monitoring.
- Fixed Facility Monitoring.

The number of technical offices can vary depending upon the size of the program and the preferences of the Governorate. In Cairo, the CMU has three technical offices in each Zone: Residential and Commercial Collection and Street and Public Facility Cleaning, Medical and Industrial Waste Collection, and Fixed Facilities. In Qalyoubiya, the CMU has only two technical offices: one for all types of Collection and Cleaning and the other for Fixed Facilities. In Alexandria the Governorate decided to have only one technical office, the Operations Monitoring Department, responsible for all types of services.

Regardless of how many technical offices are in the structure, they should be assigned the following responsibilities:

- Interpret the technical requirements of the contract.
- Prepare inspection and reporting forms for monitoring, train monitors, and provide quality control for monitoring.
- Monitor fixed facilities (landfill, transfer stations, recycling and composting facilities, etc.) to ensure that they are designed, constructed, and operated in accordance with the contract.
- Provide technical support to the local level offices.
- Receive, review, and assess monitoring reports from local offices and fixed facilities monitors.
- Receive, review, and assess the following reporting documents from the Contractors: work plans required by contract; service route maps and schedules; monthly progress reports (preparation and operations); annual operations reports, annual training report.
- Conduct analyses of monitoring reports and of its own review of work plans and reports and assess compliance with performance standards.

DESIGN THE LOCAL LEVEL ORGANIZATIONAL STRUCTURE

The primary functions of the local level organization of the CMU are to:

- Observe and evaluate Contractor compliance with contract terms.
- Promote and enforce National Laws and Governorate decrees and ordinances relating to customer use of contract services.
- Conduct public awareness and communications activities at the local level.

FIGURE 6.4: CONTRACT MONITORING UNIT - LOCAL LEVEL



Experience from Governorates that have implemented CMUs for administering solid waste and public facility cleaning services has demonstrated that field monitoring functions can be best implemented and managed by establishing local offices in each existing District or City within a Governorate. The local level structure presented in this section is illustrated in Figure 6.4.

As illustrated, a Local Manager supervises each Local Office and receives and transmits monitoring reports to the technical offices in the higher levels of the CMU. The Local Managers should seek to establish direct communications with local government officials, including the District Chairman or City Mayor and the local council.

In addition to the Manager, Local Offices should employ three types of personnel, listed below.

Local Service Monitors: Monitor locally provided services such as residential and

commercial waste collection, street cleaning, and industrial and medical waste collection. These Monitors are in the field every day and:

- Observe and report on Contractor compliance.
- Prepare and submit daily field monitoring reports.
- Provide the public with information about their waste management responsibilities.

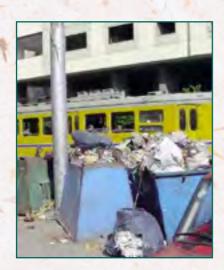
Data Specialists: Receive and compile field monitoring reports to produce daily monitoring reports for the Local Manager. Data Specialists work in the Local Office rather than in the field, and they may also be called upon to respond to citizens' inquiries and complaints.

Public Awareness and Communications Coordinators: Conduct public awareness programs at schools and nongovernmental organizations and help the Local Service Monitors effectively communicate with the public.



STEP 3:

STAFF THE ORGANIZATION



Example job descriptions for some CMU positions are provided in Appendix A.

he previous step described the process for establishing the overall structure for CMU. This section addresses the types and number of personnel required to efficiently staff the selected organizational structure. Determination of specific types and numbers of personnel should be based upon the estimated level of effort that will be required to administer the contract and monitor the service specifications and technical requirements as presented in the RFT.

To fulfill the responsibilities identified in the previous section for both the upper and local levels of the CMU will require staffing each with personnel with specialized skills and experience. Figure 6.5 presents a list of the types of positions that should be considered for inclusion in a typical CMU with a two-tiered structure. A three-tiered structure would have another upper level at the Zone, but would still need the same type of positions.

Once the basic structure and roles have been determined, the search for candidates can begin.

It is important to establish the level of management skills required for each position, related to what tasks are assigned to the position. This means determining key tasks to be performed in order to accomplish campaign goals; key organizational skills and competencies needed to complete these tasks and maintain quality (hands-on, day-to-day management versus a more passive reporting system); level of effort required to complete tasks (how many positions, how many days/hours); performance criteria for an effective team, etc.

Each proposed position should be carefully examined by asking the following questions:

- What are the intended roles and responsibilities of each position?
- Could the specific duties of each position be more efficiently carried out by merging them with another position?
- Does the position make the most effective and efficient use of resources?

A candidate profile determines the minimum requirements for education and experience that qualify a candidate for consideration. This profile serves as the basis for selection criteria, and should include concrete achievements such as a minimum degree and years of work experience in the desired field. It is also important to identify intangible prerequisites for hire, such as good communication and organizational skills, professionalism, and positive attitude.

After determining the job position, the tasks required, and forming the candidate profile, a job description can be written. The following items should be included in a job description:

- · Job title.
- Brief description of the organization, department, and/or division.
- Summary statement of the general objective.
- Purpose and level of the position.
- List of duties and responsibilities, description of role in the team, including any supervisory, subordinate, and/or other working relationships.
- List of minimum qualifications, such as education, experience, knowledge, and skills.
- Critical personal attributes such as communication and interpersonal skills, creativity, ability to work in teams, and leadership and management skills.

Office/Division	Positions
Office of the Administrator	Program Administrator Executive Secretary Executive Aide
Finance and Administration	Director Secretary Human Resources Manager Human Resources Aide Office Manager Purchasing Manager Purchasing Aide Office Janitors/Messengers Drivers Financial Manager Accountant
Legal	Director Secretary
Legal	Lawyer Legal Aide
Compliance	Manager Compliance Analyst Accountant
Technical Support and Compliance Analysis	Director Secretary Chief Engineer - Local Secretary Engineers Chief Engineer - Specialized Secretary Engineers Monitors (if not local) Chief Engineer - Fixed Secretary Engineers Monitors
Public Awareness and Communications	Director Secretary Public Awareness Specialists Public Awareness Aides Production Manager Production Aides Training Coordinator Training Aides
Local Offices	Local Manager Data Specialists Public Awareness Coordinators Local Service Monitors Janitors/Messengers/Drivers

Once accurate and complete job descriptions have been prepared, recruitment begins, beginning with advertising for the positions. While placing advertisements in the local press is a very common way to attract potential candidates, it is sometimes ineffective due to the amount of time and effort required to sort through large numbers of applicants with vast differences in qualifications. However, when there is an existing institution responsible for waste management, it may be possible to consider internal applicants. Formal applications should be required from multiple internal candidates, and they should be subject to the same rigorous process of screening as external candidates.

One potential advantage of hiring internal candidates is that by reallocating a position, excess labor in existing departments can be absorbed, lay-offs can be avoided, and previous experience in the sector is not lost. However, a potential disadvantage also exists, as any previous negative attitudes and bad habits can persist while the opportunity to hire new, energetic entrants may be lost.

In some cases, it may be a more efficient use of resources to secure the services of a recruitment agency. For a fee, recruitment agencies will publicize the position among a select pool of job hunters, and screen candidates that fit the job description and meet minimum qualifications. Agencies may allow the project administrators to bypass several steps in the hiring process. Generally, recruiting agencies are most effective when seeking candidates for senior level positions.

Once a pool of candidates has been selected, competency tests can be given to verify skill levels, and an initial screening interview will further narrow

the selection. After background and reference checks to further evaluate selected candidates, preferred candidates are then invited back for a second interview at a supervisor level. Salary negotiations begin when a hiring decision is made, or may be fixed by the governmental salary scale.

STAFF THE UPPER LEVEL ORGANIZATION

The upper level organizational structure described earlier consisted of the following functional areas:

- CMU Leadership.
- Financial and Administrative Services.
- Legal Support.
- Public Awareness and Communications.
- Technical Support and Compliance Analysis

Suggested job positions to consider for staffing each of these functional areas are briefly described below.

CMU LEADERSHIP

CMU leadership is provided by the Program Administrator with assistance from the Zone Directors in a three-tiered structure. Together they should manage and direct the CMU. Ultimately it will be their responsibility to insure that the Contractor providing services is performing according to the contract and in turn, is paid in a manner that is timely and in compliance with contract terms. They will meet regularly with the Contractor to discuss and resolve contract noncompliance. The Program Administrator and Zone Directors should have an Executive Secretary and one or more Executive Aides in their immediate offices, depending upon the size of the Governorate and the scope of services.

FINANCIAL AND ADMINISTRATIVE SERVICES

A Director of Financial and

Administrative Services should oversee administrative, financial, and budgetary support to the CMU. The Director should interact with the Governorate Finance Department to ensure that collected fees for service are deposited in the account and that Contract payments are made.

A Human Resource Manager should be employed to provide direct human resource management for the CMU. He or she should be supported by one or more Human Resource Management Aides, depending on the size of the organization.

An Office Manager should manage office space, vehicles, office equipment, and supplies for the CMU. The Office Manager should also manage a Purchasing Agent and any drivers, messengers, and janitors serving the Headquarters or Zones.

The Purchasing Agent, possibly assisted by a Purchasing Aide, should manage the purchasing process for vehicles, equipment, supplies, office space, and services for the CMU.

A Financial Manager should coordinate preparation of the annual budget for the Unit, in cooperation with the upper level and Local Managers. The Financial Manager will also be responsible for monitoring expenses for the purpose of keeping them within the budget. He or she will also oversee the work of an Accountant in the preparation, approval,

If a Governorate chooses to put the function of compiling Contractor noncompliance and calculating penalties in the finance and administration office, then the Financial Manager should also oversee the work of Compliance Analysts in this regard, monitor the Contractors' Customer Service Office, draft contract compliance instructions, and monitor the Contractor's response to them.

and transmission of invoices from the Contractor to the Governorate Finance Department.

LEGAL SUPPORT

Legal Support should be supervised by a Director who should manage the staff and serve as chief legal counsel for the CMU. As such, he or she should make all official legal interpretations of the Contracts for the CMU and represent the CMU in all legal matters. Legal Support may be divided into two Departments: Legal, and Compliance and Penalties.

Legal Department: One or more Lawyers, assisted by Legal Aides, will secure and maintain necessary permits, approvals, and licenses for the CMU and assist the Contractors in doing the same. They will also provide legal consultation to CMU personnel regarding monitoring procedures.

Compliance and Penalties Department: If the Governorate chooses to to give Legal Support the function of compiling Contractor noncompliance and calculating penalties, it will need a Compliance and Penalties Department. The Manager of the Department should oversee the compilation of contract compliance reports, the identification of noncompliance with performance standards, and, when necessary, the calculation of contract penalties. He or she should attend compliance meetings with Contractors and work with them to resolve noncompliance issues.

Compliance Analysts in the Department should compile compliance reports from the Technical Support and Compliance Analysis staff, monitor the Contractors' Customer Service Office, draft contract compliance instructions, and monitor the Contractor's response to them.

An Accountant will receive and analyze Contractors' invoices, use information provided by the Compliance Analysts to calculate compliance with Performance Standards and any resulting penalty

reductions, and arrange contract payments with Finance and Administration.

PUBLIC AWARENESS AND COMMUNICATIONS

The Public Awareness and Communications staff should be led by a Director who will develop and oversee the implementation of the Public Awareness and Communications program for the Governorate's solid waste management and public facility cleaning program. He or she will serve as the team leader for the Public Awareness and Communications Team (PACT) and provide guidance and support to all Public Awareness and Communications personnel.

Public Awareness Specialists, with the support of Public Awareness Aides, should develop and implement media strategies, promotional campaigns, and major public events to promote the implementation of the Governorate's solid waste management and public facility cleaning program.

The Public Awareness Specialists should also train and mentor Public Awareness and Communications Coordinators at the local level on the use of public awareness materials and the organization of events.

A Production Manager should be employed to supervise and manage the production of public awareness and communications materials and television, press, and outdoor advertisements. If the size of the program warrants it, this manager may be supported by a Production Aide.

A Training Coordinator should be given responsibility for all public awareness and communications training needs. The Training Coordinator will manage the logistics of communications training for all other CMU personnel and may be supported by a Training Aide.

When searching for candidates for the needed positions, consideration should be given to balancing budgetary constraints with organizational needs, and matching candidates with specific qualifications to specialized tasks. For example, if school children are to be targeted by a public awareness campaign, then a public awareness specialist with experience in elementary education might be necessary. However, if the development of a broader awareness of environmental issues is a campaign objective, then a public awareness specialist with experience in journalism or television might be necessary.



TECHNICAL SUPPORT AND COMPLIANCE ANALYSIS

Technical Support and Compliance Analysis may be housed in one unit, in which case it should be managed by a Director who should supervise individual Chief Engineers of Local Service, Specialized Service, and Fixed Facility Monitoring Departments. Some large programs may divide technical support into two or more organizational units. Regardless of the organizational structure, Technical Support and Compliance Analysis requires the following types of staff.

Local Service Monitoring: A Chief Engineer should manage and direct the technical evaluation of Contractor performance of all locally-provided services such as residential and commercial waste collection and street sweeping. This can be accomplished through his or her supervision of Local Managers that supervise local monitoring personnel or through the provision of technical support to the Local Managers. He or she will review, assess, and advise Local Managers on proposed changes in technical designs (within the bounds of the contract requirements), and will attend compliance meetings with the CMU leadership and the Contractor.

Engineers should also be employed to provide technical assistance and quality control, and train Local Service Monitors on how to monitor all locally provided services. They will also review work plans and progress reports submitted by the Contractor and assess them for compliance with contract requirements.

Compliance Analysts will be needed to receive and compile daily monitoring reports from the Local Managers and analyze them to determine if contract noncompliance has occurred. The Compliance Analysts will also receive the work plan and progress report assessments from the Engineers. They will use these inputs to produce compliance reports for the Chief Engineer.

Specialty Service Monitoring: A Chief Engineer should manage and direct the technical evaluation of Contractor performance of all specialty services such as medical and industrial waste collection. This can be accomplished through his or her supervision of Specialty Service Monitors. However, in most cases specialty services will be monitored at the local level so that he or she will oversee their implementation through the provision of technical support to the Local Managers. He or she will review, assess, and advise Specialty Service Monitors or Local Managers on proposed changes in technical designs (within the bounds of the contract requirements), and will attend compliance meetings with the CMU leadership and the Contractor.

Engineers should be employed to provide technical assistance and quality control, and train Specialty Service Monitors or Local Service Monitors on how to monitor all specialty services. They will also review work plans and progress reports submitted by the Contractor and assess them for compliance with contract requirements.

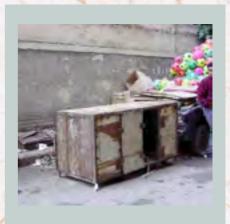
Compliance Analysts will be needed to receive and compile daily monitoring reports from the Local Managers and analyze them to determine if contract noncompliance has occurred. The Compliance Analysts will also receive the work plan and progress report assessments from the Engineers. They will use these inputs to produce compliance reports for the Chief Engineer.

Fixed Facility Monitoring Department:
A Chief Engineer should manage and direct the technical evaluation of Contractor compliance with contract terms for fixed facilities. The Chief Engineer will review, assess, and advise the Engineers on proposed changes in technical designs and attend compliance meetings with the CMU leadership and the Contractor.

One or more Engineers should be employed to provide technical assistance and quality control, and train Fixed Facility Monitors. The Engineers will spend much of their time at the fixed facilities working with the Monitors. The Engineers should review work plans and progress reports submitted by the Contractor and assess them for compliance with contract requirements. Fixed Facility Monitors are required to ensure that the fixed facilities are monitored during all times of operation. Many types of fixed facilities operate 24 hours per day, 7 days per week, so each facility may need four monitors for full-time coverage

Fixed Facility Monitors should have engineering degrees and be trained to monitor every type of fixed facility provided or operated by the Contractor. They should periodically be assigned to different facilities so that they gain experience in each type of facility monitoring and avoid developing relationships with facility employees that might impair their ability to objectively perform their monitoring responsibilities.

Compliance Analysts will be needed to receive and compile daily monitoring reports from the Fixed Facility Monitors and analyze them to determine if contract noncompliance has occurred. The Compliance Analysts will also receive the work plan and progress report assessments from the Engineers. They will use these inputs to produce compliance reports for the Chief Engineer.





STAFF THE LOCAL LEVEL ORGANIZATION

Each local office should be led by a Manager who will be responsible for managing all local employees and providing them with technical guidance, in collaboration with the Technical Support and Compliance Analysis offices. He or she will also be responsible for communicating with the District Chairman or City Mayor and local councils and responding to their concerns. However, the Local Managers will not be able to enforce the contract or order the Contractors to take particular actions, as contract enforcement and official communication with the Contractors should occur only at the upper levels of the organization.

Each Local Office should have a driver and a janitor/messenger as well as the following:

- Local Service Monitors.
- Data Specialists.
- Public Awareness and Communications Coordinators.

The duties and responsibilities associated with these positions have been described earlier in the section on Organizational Structure and in some cases are elaborated on in the job descriptions provided in Appendix A.

The number of Local Service Monitors, Data Specialists, and Public Awareness and Communications Coordinators needed in each local office will vary with the geographical size and building density in the area served, and with the type and scope of services provided. Following are descriptions of criteria that can be used to estimate the number of each type of employee required in local offices.

DETERMINE THE APPROPRIATE NUMBER OF MONITORS PER LOCAL OFFICE

Within a given local office, field monitoring can be allocated on a geographic or functional (service) basis where related localized services such as waste collection and street cleaning are to be provided.

Assigning the oversight of all related Contractor services within a small geographic area will result in minimizing travel and optimizing monitoring. The alternative of assigning monitors to

observe only one service activity over a larger service area could result in decreased productivity due to increased travel time requirements. An additional advantage of the geographic based option is the ability to assign total responsibility for area cleanliness to one monitor, thereby eliminating any potential internal disagreements over which Contractor activities are contributing to non-compliant conditions.

It is anticipated that field monitoring on a geographic area basis will result in the highest productivity and most intensive scrutiny of Contractor activities and performance.

With the exception of monitoring collection of wastes done at the Dwelling Unit door (inside the building), Local Service Monitors will observe and evaluate public behavior and Contractor service performance by traveling along roads or on sidewalks. Thus the primary criteria for determining the appropriately sized area to assign to each monitor in addition to the types of services to be monitored are the amount of area or kilometers of road that can be covered in a workday. Assuming that a monitor will be able to spend only 6 hours per day in the field, coverage of no more than 6 kilometers, or 1 kilometer per hour would be a reasonable goal.



Other parameters may also be used in the assignment of the monitoring areas. These include population, housing density, and number of commercial businesses in the area to be monitored. Before final monitoring areas are assigned, a comprehensive inventory of the selected parameters should be conducted and field testing of proposed assignments performed.

The size of the area assigned to each monitor is only one of the two factors that must be considered to determine the appropriate number of monitors. The other factor is the frequency of monitoring — "How often do you want the monitor to inspect each assigned area?" The most intense level of monitoring is to have each monitor inspect each assigned area every day. This level of monitoring, however, is quite costly and seldom warranted. A sampling strategy, in which the monitor visits each area every third day or every fourth day is generally adequate.

The frequency of monitoring can vary over time, with more frequent monitoring at the beginning of the contract period. At the beginning of a contract the Contractor is still perfecting the service delivery system and the Governorate may have less confidence in the Contractor's ability to perform, so you may want to inspect each area every second or third day. Later, as the Contractor perfects its service delivery system and the Governorate gains confidence in the Contractor's ability, the same area may only need to be

inspected every sixth day for example.

To calculate the appropriate number of monitors for a local office, you divide the total Service Area by the area that each monitor can cover in a day, and then divide by the frequency of monitoring that you desire. For example, if you have a Service Area of 15 square kilometers, have determined that a monitor can cover 0.5 square kilometers per day, and you want each area to be inspected every third day, you would make the following calculations:

$$\frac{\text{Service Area}}{\text{Area Monitored per Day x Frequency}} = \frac{15}{0.5 \text{ X 3}} = 10 \text{ Monitors}$$

Field testing in the Governorate of Cairo revealed that the area a Monitor observing all waste collection and street cleaning services could effectively cover in one day is as follows:

Door-to-Door Waste Service Areas
Low Density Building-to-Building Service Area
Medium Density Building-to-Building Service Area
High Density Building-to-Building Service Area
Waste Pooling Site Service Areas

0.15 km² 0.80 km²

0.50 km² 0.15 km²

0.30 km²

DETERMINE THE NUMBER OF DATA SPECIALISTS AND PUBLIC AWARENESS AND COMMUNICATIONS COORDINATORS

Data Specialists can be expected to process daily monitoring reports from four to six monitors each depending upon the number of type of services being provided, and the level of contract compliance. The number of Public Awareness and Communications

Coordinators in a local office might range from one to three, largely depending upon the population of the area served and the number of contract services

OBTAIN MINISTRY APPROVAL FOR THE CMU POSITIONS

Once an estimate of the number of personnel needed at the upper and local levels is established, the Governorate

will then need to submit a request for approval of the positions from the Ministry of State for Administrative Development.



STEP 4:

IDENTIFY EQUIPMENT NEEDS





All Monitors and Engineers will need to be immunized to protect them against potentially communicable diseases transmitted by contact with contaminated waste. They will also need uniforms that are comfortable, yet attractive, and clearly identify them as Governorate employees.

o perform all of its functions efficiently, the CMU will need office space, office supplies and field equipment, and vehicles at both the upper and local levels. An example of an equipment needs worksheet for a typical CMU is provided in Appendix B.

UPPER LEVEL EQUIPMENT NEEDS

All of the professional, technical, and administrative employees housed in the upper level offices will need offices and work stations (desk, chair, guest chairs computer, printer, and telephone). Most of the lower- and mid-level employees will be able to share office space, but they will each need work stations as well. Headquarters and Zones will need a conference room with a large conference table and chairs and at least one high capacity photo copier. The Headquarters and Zone offices will need vehicles and drivers to allow employees to attend outside meetings, and visit local offices and solid waste facilities.

FIXED FACILITY EQUIPMENT NEEDS

Fixed Facility Monitors will not need offices, as the Contractor should be required to provide them with office space at each facility. The CMU will have to furnish office equipment for one work station at each facility. Fixed Facility Monitors will need a computer and some basic field equipment including clip boards, monitoring forms, and pencils, as well as safety equipment including gloves, ear protection, hard hats and steel-toed shoes. They may also need some specialized equipment, such as temperature probes at the compost facility.

LOCAL LEVEL EQUIPMENT NEEDS

Each Local Office should have a large conference room for daily use by Public Awareness Coordinators and Monitors and for staff meetings. The Local Manager will need an office, but the Data Specialists should be able to share

office space. The Local Manager and the Data Specialists will need work stations. Each local office will also need at least one multi-passenger vehicle to get the Monitors to and from their assigned areas.

The Local Service Monitors and the Public Awareness Coordinators will not need offices or work stations, as they will perform their duties in the field. They will need uniforms that are comfortable, yet attractive, and clearly identify them as Governorate employees. Monitors will need radios to communicate with the Data Specialists and the Local Manager. They will also need some very basic field equipment including clip boards, monitoring forms, pencils and chalk, and tape measures. They should also have access to cameras kept at the Local Office, preferably digital, so that complaints and noncompliance of service can be unmistakably identified and conveyed (over the internet) with precision to the Contractor or citizen responsible for the misconduct.

Additional equipment and supply needs include:

- At least one computer for each Data Specialist, networked with the Headquarters office, and at least one printer.
- Dedicated telephone lines with a fax machine.
- Small capacity photocopier.
- Maps illustrating Contractor waste collection and street sweeping routes/schedules.
- Scooters or bicycles for Local Service Monitors (if they have to travel far between the areas in their assigned areas).

STEP 5:

DEVELOP A BUDGET

he budget for implementation and operation of a CMU as illustrated in Figure 6.6 is comprised of the following four parts:

- Start-Up Equipment.
- Recurrent Equipment.
- Supplies.
- · Personnel.

Start-Up Equipment expenses include one-time expenditures for purchase of the initial equipment for the CMU such as vehicles, office and field equipment, and training costs. All of the other costs are annual operating costs. For budgeting purposes, assume that Recurrent Equipment costs will approximately 10 percent of the Start-Up Equipment costs, which in effect amortizes equipment over a tenyear period. Supplies include office supplies, utilities, fuel vehicle and equipment maintenance, uniforms, and field equipment.

Personnel costs include salaries plus benefits, taxes incentives and annual bonuses for all of the employees in the Unit. After the first year, Personnel Costs will comprise a significant portion of the total budget.

First Year Costs (Start-Up Equipment + Supplies + Personnel) are significantly higher than Subsequent Year Annual Costs (Recurrent Equipment + Supplies + Personnel) because they include the full costs of purchasing all of the start-up equipment. Subsequent Year Annual Costs should be expected to grow with inflation by about 2 percent per year.

FIGURE 6.6: CMU BUDGETING WORKSHEET

COST CENTER	START-UP EQUIPMENT	RECURRENT EQUIPMENT	SUPPLIES	PERSONNEL	FIRST YEAR COST	SUBSEQUENT YEAR ANNUAL COSTS
Headquarters						
Local Office 1						
Local Office 2						
Local Office 3						
CMU Total						

STEP 6:

DEVELOP A CONTRACT MONITORING PLAN





The CMP does not need to address administration and organizational support activities that most governmental units typically perform, since guidance on these matters is available elsewhere. Instead, the CMP should concentrate on the activities that are unique to the administration and monitoring of contracted solid waste management and public facility cleaning services.

he Contract Monitoring Plan (CMP) is the document by which the CMU conducts its business. The CMP should provide detailed guidance on how each person in the CMU performs his or her respective daily activities. It should also describe all chains of command and the flow of all documents. Detailed procedures for each type of administrative and monitoring activity should be provided in the CMP and in field procedures manuals attached as Appendices. Because the CMP must be specific to the contract being monitored, it cannot be fully developed until Contractor has been selected and has submitted a Draft Work Plan.

An example table of contents for a CMP is presented in Appendix C. Each of the key subject areas is separately addressed in subsequent subheadings of this section of the chapter.

INTRODUCTION

The introductory section of the CMP should identify broad tasks that the Governorate and the Contractor are expected to perform under the contract. There are four sections:

- Scope of the Monitoring Plan.
- Purpose and Structure of the Document.
- Basis for Contract Monitoring Unit Activities.
- Statement of Monitoring Independence and Accountability.

SCOPE OF THE MONITORING PLAN

The scope of the CMP should clearly state what is included in the plan. This may include some or all of the following:

- How service specification and minimum technical requirements will be monitored in the field.
- How public compliance with rules and regulations will be monitored and enforced.
- The deliverables to be provided by each CMU employee and the Contractor.
- The flow of all documents through the CMU.
- The information to be provided by the Contractor to the Governorate.
- The information to be provided by the Governorate to the Contractor.

 The sequence and scheduling of contracted solid waste and public cleaning service activities.

PURPOSE AND STRUCTURE OF THE DOCUMENT

This section should include a clear statement of the purpose of the CMP and describe how the CMP is organized.

THE BASIS FOR CMU ACTIVITIES

This section should include specific references to the National Laws and Governorate Decrees that provide the authority for the Government to regulate solid waste and public facility cleaning services. It should also refer to clauses in either the RFT or the contract that provide a basis for contract administration and monitoring. This will provide all employees of the CMU, as well as any other interested parties with an understanding of the legal basis in addition to the logical rationale for contract monitoring, both of which provide a firm foundation for exercise of their daily activities.

STATEMENT OF MONITORING INDEPENDENCE AND ACCOUNTABILITY

A long-term contract entails an ongoing relationship between the employees of the Contractor and the employees of

the CMU. To avoid partiality or any appearance of partiality on the part of the CMU employees, rules governing their conduct in this relationship should be formally established and stated up front in the CMP. This section of the Introduction should state the Governorate's policies regarding independence and accountability of CMU staff. Details on implementation of the policies should be included in the Appendices.

Among the issues that should be addressed is the traditional ethical problem of expected behavior in response to gifts. To that end, the Governorate should set a policy that no CMU staff is to solicit or accept gifts or gratuities of any kind from the Contractor. Examples of unacceptable practices should be included in the Appendices, such as the Contractor may not pay for meals, give gifts, provide tickets for sporting events, allow use of company vehicles or facilities or provide a CMU employee with any other material benefits.

Another issue for which policies and procedures may need to be developed is the human element of the working relationship. While trust and civility are important, CMU employees must be trained to guard against a gradual yet insidious relaxation of their independence and objectivity needed for monitoring and enforcing the contract. To ensure against such an unacceptable result, all CMU employees should be subject to removal for proven misconduct in maintaining independence. Such a process will require transparency, with reasons for any decision being based on credible and defensible evidence.

ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES

This section of the CMP should contain a complete description of the organizational structure of the CMP, including the following:

- An organizational chart.
- The responsibilities assigned to each organizational unit in the CMU.
- The chain of command.
- The proposed staffing levels.

For each functional unit in the CMU, the CMP should enumerate the responsibilities assigned to the unit, describe each job position, the total number to be employed in each position, the daily activities associated with each position, and the flow and processing of communications and documentation through the unit. Job descriptions for all of the types of positions should be included in an appendix.

FIELD MONITOR PROCEDURES MANUALS

Each type of monitor will be responsible for evaluating Contractor compliance on a daily basis with as many as 200 service specifications and minimum technical requirements. Since monitors cannot be expected to memorize the precise wording of each, it will be necessary to include all of the relevant specifications, minimum technical requirements, and monitoring procedures in a procedures manual for each type of monitor. The manuals should be easy to carry and use in the field. It is best to attach individual procedures manuals as appendices to the CMP.

The manuals should also address how monitors will observe, promote, and motivate customer observance of Egyptian Environmental Laws and Governorate solid waste decrees and ordinances.

This section should confirm the commitment of the CMU to aggressively endeavor to establish and maintain open, above-board businesslike relationships with all Contractor personnel that do not leave employees, the Contractor, or the general public with questions about the parties' motives.



To facilitate monitor usage, it is suggested that the following format be used in writing individual procedures manuals:

- Organize the service specifications and minimum technical requirements into logical monitoring categories, e.g. specific type of service such as Door-to-Door waste collection or mechanical street sweeping.
- Within the selected type of service categories, group service specification and minimum technical requirement that relate to a common parameters, e.g. personnel or equipment requirements.
- For each grouping, cite each service specification and minimum technical requirement precisely as written in the contract or RFT.
- Briefly describe how the Contractor proposes to comply based on the Draft Work Plan submitted with the Tender Offer.
- Describe in detail what the monitor will do in the field to evaluate Contractor compliance with each specification and technical requirement.
- Describe what information the monitor should record to document a potential violation.
- In the last section of the procedures manual, describe how the monitor will observe, evaluate, and promote customer compliance with service rules and regulations.

STEP 7:

HIRE AND TRAIN STAFF

Senior Management level personnel should be hired before developing the CMP to allow their participation in the design of the organization and development of the CMP. All management staff should be hired early enough in the process to allow their training to begin prior to that of the Monitors.

taff should be hired as soon as the CMP is complete.

Training of the Local Managers and all management level personnel at the upper level should consist of a minimum of 1 week of classroom work that provides them with comprehensive knowledge of the entire privatization process from preliminary feasibility planning through monitoring and administration.

The initial Monitor training will occur during the Contractor's preparation period, typically 6 to 9 months prior to the start of service. The Engineers in the Technical Support and Compliance Analysis offices will develop the training materials based on the Contractor's final work plans and the knowledge gained through their own training. The Engineers will submit draft training material to their Chief Engineer

for review and approval. The Chief Engineers should ensure that the content and delivery of training to Local Service Monitors will prepare them fully for their duties and responsibilities.

The training of all Monitors should be based on the procedures manuals and the Contractor's work plan and concentrate on teaching them how to evaluate contractor compliance with each of the service specifications and minimum technical requirements contained in the contract. Three to four days of



classroom training should be followed by in-the-field training to demonstrate actual monitoring procedures and identify potential obstacles to efficient monitoring.

Periodic refresher training courses should be offered for all Monitors as well as orientation training for newly hired Monitors. The objective of the refresher courses will be to update the Monitors on any changes in the service specifications and/or interpretation of the Contract requirements.

The Training Coordinator should be given responsibility for all Public Awareness and Communications Team training needs. The Training Coordinator will manage the logistics of public communications training for all other CMU personnel as well.

Local Managers will arrange for training and technical guidance from the Technical Support and Compliance Analysis for the Data Specialists, Local Service Monitors and Public Awareness and Communication Coordinators. They will have been trained in solid waste management and public facility cleaning, the Service Specifications and Technical Requirements, and the specific activities to be performed by the Data Specialists, Monitors, and Public Awareness and Communications Coordinators. They will ensure that all local office personnel are fully trained and capable of performing their jobs.



APPENDIX A: EXAMPLE JOB DESCRIPTIONS

SOLID WASTE MANAGEMENT CONTRACT MONITORING UNIT			
	JOB DESCRIPTION		
JOB TITLE	Program Administrator		
INSTIT. UNIT	Solid Waste Management Contract Monitoring Unit		
REPORTS TO	Governor or Secretary General		
LOCATION	Headquarters		
SUPERVISES	Secretary Division Directors Local Managers		
JOB SUMMARY	Manage and direct the Contract Monitoring Unit (CMU). Ensure that the Contractors are performing according to their contracts and are paid for their services in a timely manner. Provide the citizens of the Governorate with information on solid waste management so that they can help create a cleaner governorate.		
DUTIES AND RESPONS- -IBILITIES	 Provide strategic program direction for the CMU and manage and direct a staff of up to several hundred professionals. Establish program goals and individual service objectives. Develop and meet an annual work plan and budget for the Unit. Represent the Governorate in all dealings with the Contractors. Meet with Contractors' representatives at least weekly to review contract compliance and resolve noncompliance where possible. Sign and send to the Contractors written instructions to provide services when noncompliance is documented. Approve final determinations of contract noncompliance and corresponding penalty deductions and authorize Contractors' payments. Approve any changes in technical implementation of the contracts. Negotiate contract revisions with the Contractors as necessary. Prepare and submit reports to the Governor or Secretary General. Coordinate the activities of the CMU with other governorate departments. Provide testimony at local and national legislative and regulatory hearings. Make formal presentations at national and international conferences. 		
	MINIMUM QUALIFICATIONS		
EDUCATION	A Bachelor's Degree.		
EXPERIENCE	 20 years of experience in an upper-level management position. Responsibility for annual budgets. Management of a staff. Experience in managing large operations contracts. 		
SKILLS	 Demonstrated ability to achieve organizational goals on time and on budget. Strong leadership skills. Strong communications skills including public speaking. 		
WORKING CONDITIONS	The position is primarily a desk job. It will require some travel within the Governorate to attend meetings and observe field operations. It may also require some travel outside of the Governorate to attend national and international meetings and conferences.		



SOLID WASTE MANAGEMENT CONTRACT MONITORING UNIT JOB DESCRIPTION			
JOB TITLE	Chief Engineer		
INSTIT. UNIT	Collection and Cleaning Division		
REPORTS TO	Program Administrator		
LOCATION	Headquarters		
SUPERVISES	Secretary Engineers Compliance Analysts		
JOB SUMMARY	Manage and direct the technical evaluation of Contractors' performance for solid waste collection and public facility cleaning.		
DUTIES AND RESPONS- -IBILITIES	 Manage Division staff. Interpret the technical requirements of the contracts for waste collection and street and public facility cleaning. Review, assess, and advise the Program Administrator on proposed changes in technical designs (within the bounds of the contract requirements) for collection containers, collection vehicles, and street and public facility cleaning equipment. Review, assess, and advise the Program Administrator on proposed changes in the placement of collection containers (within the bounds of the contract requirements). Identify potential technical problems with waste collection and street and public facility cleaning and cooperate with the Contractors to develop mutually acceptable remedies. Prepare monitoring forms for waste collection and street and public facility cleaning. Attend compliance meetings with the Program Administrator and the Contractors. Oversee training of Local Service Monitors on how to monitor waste collection and street and public facility cleaning. Oversee technical assistance to Local Managers and Local Service Monitors on waste collection and street and public facility cleaning. Oversee compliance determinations concerning waste collection and street and public facility cleaning. 		
	MINIMUM QUALIFICATIONS		
EDUCATION	Bachelor's Degree in civil, mechanical, sanitary, or environmental engineering.		
EXPERIENCE	 10 years experience as an engineer. 2 years experience in solid waste management or public facility cleaning Experience in a management position. 		
SKILLS	 Knowledge of solid waste collection and/or street and public facility cleaning technologies. Strong leadership skills. Strong interpersonal and communication skills. 		
WORKING CONDITIONS	The position is primarily a desk job, but the individual will spend about 25 percent of his or her time in meetings at Headquarters or in the field meeting with Local Managers and Local Service Monitors and observing contract compliance.		



SOLID WASTE MANAGEMENT CONTRACT MONITORING UNIT JOB DESCRIPTION			
JOB TITLE	Engineer		
INSTIT. UNIT	Collection and Cleaning Division		
REPORTS TO	Chief Engineer, Collection and Cleaning Division		
LOCATION	Headquarters		
SUPERVISES	None		
JOB SUMMARY	Provide technical assessment of Contractors' performance for solid waste collection and public facility cleaning, train Local Service Monitors, and provide Local Managers and Local Service Monitors with technical assistance and quality control.		
DUTIES AND RESPONS- -IBILITIES	 Advise the Chief Engineer on interpretation of the technical requirements of the contracts for waste collection and street and public facility cleaning. Assist the Chief Engineer in the development of monitoring forms for waste collection and street and public facility cleaning. Train Local Service Monitors how to monitor waste collection and street and public facility cleaning. Provide quality control of monitoring for waste collection and street and public facility cleaning. Provide technical support to Local Managers and Local Service Monitors on waste collection and street and public facility cleaning. Provide technical support to the Division Compliance Analysts. Receive and review Contractors' work plans, progress reports, operations reports, and training reports for waste collection and street and public facility cleaning and assess them for compliance with Contract specifications. 		
	MINIMUM QUALIFICATIONS		
EDUCATION	Bachelor's Degree in civil, mechanical, sanitary, or environmental engineering.		
EXPERIENCE	3 years experience as an engineer.		
SKILLS	 Knowledge of solid waste collection and/or street and public facility cleaning technologies. Strong interpersonal and communication skills. Computer skills in word processing and spreadsheets. 		
WORKING CONDITIONS	The position requires significant time (up to 50 percent of individual's working time) in the field to meet with and train Local Service Monitors and observe their monitoring activities.		

SOLID WASTE MANAGEMENT CONTRACT MONITORING UNIT JOB DESCRIPTION			
JOB TITLE	Compliance Analyst		
INSTIT. UNIT	Collection and Cleaning Division		
REPORTS TO	Chief Engineer, Collection and Cleaning Division		
LOCATION	Headquarters		
SUPERVISES	None		
JOB SUMMARY	Analyze monitoring reports and evaluate Contractor compliance with contract requirements for waste collection and street and public facility cleaning.		
DUTIES AND RESPONS- -IBILITIES	 Receive waste collection and street and public facility cleaning monitoring reports from the Local Managers. Compile and analyze monitoring reports evalutating contract compliance and identify areas of possible noncompliance. Receive from Division Engineers analyses of Contractors' work plans, progress reports, operations reports, and training reports and compile the results. Compile daily compliance reports and forward them to the Chief Engineer of the Division. Draft written instructions to the Contractors regarding noncompliance for waste collection and street and public facility cleaning for approval of the Chief Engineer and signature of the Program Administrator. 		
	MINIMUM QUALIFICATIONS		
EDUCATION	Bachelor's Degree in engineering, science, math, law, or another quantitative or analytical field.		
EXPERIENCE	3 years of professional experience.		
SKILLS	 Demonstrated analytical ability. Ability and willingness to learn technical information regarding waste collection and street and public facility cleaning. Ability to deliver products in the form required and on-time. Strong writing skills. Computer skills in word processing and spreadsheets. 		
WORKING CONDITIONS	The position is primarily a desk job; however, the analyst will be expected to periodically spend some time in the field with monitors to familiarize him or herself with monitoring procedures and field conditions.		



SOLID WASTE MANAGEMENT CONTRACT MONITORING UNIT				
	JOB DESCRIPTION			
JOB TITLE	Director			
INSTIT. UNIT	Public Awareness and Communications Division			
REPORTS TO	Program Administrator			
LOCATION	Headquarters			
SUPERVISES	Public Awareness Specialists Production Manager Training Coordinator			
JOB SUMMARY	Develop and oversee the implementation of the Public Awareness and Communications program for the Contract Monitoring Unit (CMU). Supervise the staff of the Public Awareness and Communications Division and provide guidance and support to the Public Awareness and Communications coordinators in the local offices.			
DUTIES AND RESPONS- -IBILITIES	 Manage the Headquarters' Public Awareness and Communications Division. Develop the Public Awareness and Communications Strategy for the CMU and monitor and evaluate its implementation. Develop and manage the Public Awareness and Communications work plan and budget for Headquarters and monitor development and implementation of local level Public Awareness and Communications work plans and budgets. Oversee the development of public awareness and communications programs and materials produced by the CMU. Coordinate with the Contractors in producing public awareness and communications materials and conducting campaigns to optimize consistency and impact of messages. Oversee Contractors' compliance with public information requirements. Oversee the preparation of news articles and press releases. Identify and secure outside funding and private sponsorship for public awareness and communications campaigns. Oversee the development and implementation of training for Public Awareness and Communications personnel. 			
	MINIMUM QUALIFICATIONS			
EDUCATION	Bachelor's Degree in communications, journalism, or public relations			
EXPERIENCE	 10 years experience in communications or public awareness based activities. 5 years of management experience. Experience in project planning, management, and evaluation. 			
SKILLS	 Knowledge of the local media markets. Demonstrated creativity and vision. Strong leadership skills. Strong communications skills including public speaking. 			
WORKING CONDITIONS	The position is primarily a desk job. It will require some travel within the Governorate to attend meetings and observe field operations.			



SOLID WASTE MANAGEMENT CONTRACT MONITORING UNIT			
	JOB DESCRIPTION		
JOB TITLE	Public Awareness Specialist		
INSTIT. UNIT	Public Awareness and Communications Division		
REPORTS TO	Director, Public Awareness and Communications Division		
LOCATION	Headquarters		
SUPERVISES	Public Awareness Aide		
JOB SUMMARY	Assist the local level Public Awareness and Communications Coordinators with the implementation of the Public Awareness and Communications Strategy. Evaluate Contractors' compliance with public awareness and communications requirements.		
DUTIES AND RESPONSIBILITIES	 Assist the Division Director in the development and implementation of the Public Awareness and Communications Strategy and the work plan and budget. Train, mentor, and provide technical support to the Public Awareness and Communication Coordinators. Develop public awareness and communications materials. Distribute public awareness materials and publications to the local offices and develop distribution guidelines to ensure efficient distribution to all stakeholders. Prepare news articles and press releases. Receive and process citizen inquiries and complaints. Monitor the Contractors' Customer Service Offices and evaluate compliance with performance monitoring thresholds. Receive and review Contractors' Public Information Plans, progress reports, operations reports, and training reports and assess them for compliance with Contract specifications. Produce weekly compliance reports and forward them to the Division Director. Manage third-party contracts to conduct public awareness polls for use in assessing the effectiveness of Contractor performance. 		
	MINIMUM QUALIFICATIONS		
EDUCATION	Bachelor's Degree in journalism, communications or public relations.		
EXPERIENCE	 2 years experience in public relations or communications. Experience in conducting public awareness activities is an asset. 		
SKILLS	 Organization and management skills. Excellent oral and written communication skills. 		
WORKING CONDITIONS	The position requires significant travel (up to 50 percent of individual's working time) to the field to meet with and train Public Awareness and Communications Coordinators and observe their activities.		



SOLID WASTE MANAGEMENT CONTRACT MONITORING UNIT JOB DESCRIPTION				
JOB TITLE	Local Manager			
INSTIT. UNIT	Local Office			
REPORTS TO	Program Administrator			
LOCATION	Local Office			
SUPERVISES	 Data Specialists Public Awareness Coordinators Local Service Monitors Janitors/Messengers Drivers 			
JOB SUMMARY	Manage and direct the local (City or District) office to ensure that the Contractors providing solid waste management and public cleaning services are performing according to their contracts.			
DUTIES AND RESPONS- -IBILITIES	 Assist the Program Administrator in the development of an annual work plan and budget for the local office. Manage the local office staff and implement the approved work plan and budget. Meet regularly with local government officials from the service area to identify and address local concerns regarding contract implementation. Coordinate with other local level Governorate offices to effectively deliver solid waste management services. Review and approve the daily monitoring reports prepared by the Data Specialists and forward them to the Collection and Cleaning Division. Identify critical noncompliance concerns and cooperate with the Contractors to develop mutually acceptable remedies. Attend compliance meetings with Contractors as requested by the Program Administrator. Refer citizen violations of solid waste management rules and regulations to the appropriate authorities. 			
	MINIMUM QUALIFICATIONS			
EDUCATION	Bachelor's Degree in engineering, business, or public administration.			
EXPERIENCE	 10 years of professional experience. 5 years experience in a management position. Experience with contract management. Experience working with local officials. Experience in dispute resolution. 			
SKILLS	Strong interpersonal and communication skills.			
WORKING CONDITIONS	The position is primarily a desk job, but the individual will spend about 25 percent of his or her working time in the field working with the monitors and will be required to travel to the Headquarters office for meetings.			



SOL	SOLID WASTE MANAGEMENT CONTRACT MONITORING UNIT JOB DESCRIPTION			
JOB TITLE	Data Specialist			
INSTIT. UNIT	Local Office			
REPORTS TO	Local Manager			
LOCATION	Local Office			
SUPERVISES	None			
JOB SUMMARY	Compile data collected by Local Service Monitors and submit daily reports to the Local Manager.			
DUTIES AND RESPONS- -IBILITIES	 Receive and compile daily monitoring data from the Local Service Monitors. Prepare daily monitoring reports and submit them to the Local Manager. Receive and process citizen inquiries and complaints. 			
	MINIMUM QUALIFICATIONS			
EDUCATION	Bachelor's Degree.			
EXPERIENCE	None			
SKILLS	 Sincere interest in public works and/or environmental protection. Strong interpersonal and communication skills. Ability to deliver products in the form required and on-time. Computer skills in word processing and spreadsheets. 			
WORKING CONDITIONS	The position is primarily a desk job.			

SOLID WASTE MANAGEMENT CONTRACT MONITORING UNIT JOB DESCRIPTION				
JOB TITLE	Local Service Monitor			
INSTIT. UNIT	Local Office			
REPORTS TO	Local Manager			
LOCATION	Local Office			
SUPERVISES	None			
JOB SUMMARY	Monitor Contractor performance in residential, commercial, industrial, and medical solid waste collection and street and public facility cleaning.			
DUTIES AND RESPONS- -IBILITIES	 Study and become fully knowledgeable of contract specifications for waste collection and street and public facility cleaning. Monitor Contractor compliance with the specifications for waste collection and street and public facility cleaning in assigned area. As opportunities present themselves, inform Contractor supervisory personnel of potential contract noncompliance and develop mutually acceptable remedies. Monitor public behavior and compliance with solid waste management rules and regulations. Inform citizens of potential violations of rules and regulations. Observe and report violations of solid waste management rules and regulations to the Local Manager. Complete monitoring forms daily and submit them to the Data Specialists. Prepare defensible documentation of Contractor noncompliance with contract terms for penalty assessment. 			
	MINIMUM QUALIFICATIONS			
EDUCATION	Bachelor's Degree.			
EXPERIENCE	None			
SKILLS	 Sincere interest in public works and/or environmental protection. Ability and willingness to learn technical information regarding residential and commercial collection and street and public facility cleaning. Excellent health and physical condition. Tolerance for working under adverse environmental and weather conditions. Strong interpersonal and communication skills. 			
WORKING CONDITIONS	The position is a field position. The individual will spend nearly all of his or her working time walking in a prescribed area and observing waste collection and cleaning services provided by the contractor. The individual will be dropped off at his or her prescribed area each morning and picked up each evening. He or she will spend some time in the local office to prepare reports and attend meetings.			



SOLID WASTE MANAGEMENT CONTRACT MONITORING UNIT JOB DESCRIPTION					
JOB TITLE	Public Awareness Coordinator				
INSTIT. UNIT	Local Office				
REPORTS TO	Local Manager				
LOCATION	Local Office				
SUPERVISES	None				
JOB SUMMARY	Implement specific elements of the Public Awareness and Communications Strategy and work plan within the local service area.				
DUTIES AND RESPONS- -IBILITIES	 Prepare and make presentations at schools, universities, non-governmental organizations, religious institutions, and other civic organizations on solid waste management and the privatization of solid waste services. Organize public awareness events and activities in the service area including lectures, seminars, clean-up campaigns, and contests. Promote the objectives of the Governorate's solid waste management and public cleaning program at public events via information booths and the distribution of materials. Work with target groups in the service area to increase their awareness of solid waste management and the privatization of solid waste services. Coordinate the distribution of public awareness and communications materials. Provide Local Service Monitors with public awareness and communications materials and assist them with public relations. Prepare monthly reports describing specific public awareness and communications activities implemented in the assigned local service area. 				
	MINIMUM QUALIFICATIONS				
EDUCATION	Bachelor's Degree.				
EXPERIENCE	None				
SKILLS	 Sincere interest in public works and/or environmental protection. Excellent communications skills. Presentation and organization skills. Ability to communicate with public. 				
WORKING CONDITIONS	The position requires significant time out of the office (up to 75 percent of individual's working time) to make public awareness presentations to schools and non-governmental organizations. The other 25 percent of the individual's time will be spent in the office preparing for the presentations.				



APPENDIX B: EXAMPLE CMU EQUIPMENT NEEDS WORKSHEET

EQUIPMENT NEEDS FOR CMU

	HEAD QUARTERS	LOCAL OFFICE 1	LOCAL OFFICE 2	LOCAL OFFICE	CMU TOTAL		
Office ^a							
Work Station ^b							
Extra Guest Chair							
Computer and Printer							
Small Conference Table and Chairs							
Large Conference Table and Chairs							
Fax							
File Cabinet							
Map Cabinet							
Large Photo Copier							
Small Photo Copier							
Air Conditioner							
Water Cooler							
Scooter							
Car/Twin-Cab Pickup							
Micro-Bus							
Uniform							
Field Equipment ^C							
Radio							
Camera							
Notes: Every office will have a ceiling fan. Work Station = Desk, Chair, Telephone, and Guest Chair. Varies with type of monitor.							

APPENDIX C: EXAMPLE TABLE OF CONTENTS FOR A CMP

INTRODUCTION

- The Scope of the Monitoring Plan
- Purpose and Structure of the Document
- The Basis for Contract Monitoring Unit Activities
- · Statement of Monitoring Independence and Accountability

ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES

- · Administration at the Governorate Level
 - Office of the Program Administrator
 - Office Responsibilities
 - Staffing and Description of Assigned Activities
 - Legal and Compliance Division
 - Division Responsibilities
 - Staffing and description of Assigned Activities
 - Legal Department
 - Compliance and Penalties Department
 - Finance and Administration Division
 - Division Responsibilities
 - Staffing and Description of Assigned Activities
 - Public Awareness and Communications Division
 - Division Responsibilities
 - Staffing and Description of Assigned Activities
 - Technical Division
 - Division Responsibilities
 - Staffing and Description of Assigned Activities
- District Level Offices
 - Office Responsibilities
 - Staffing and Description of Assigned Activities

APPENDICES

- A- Detailed Procedures for Policies on Monitoring Independence and Accountability
- B- Job Descriptions
- C- Local Service Monitor Field Procedures Manual
- D- Specialized Service Monitor Field Procedures Manual (If different from Local Service Monitoring)
- E- Fixed Facility Monitor Field Procedures Manuals (One for each type of Fixed Facility)



